

Bicycle and Pedestrian Travel Master Plan

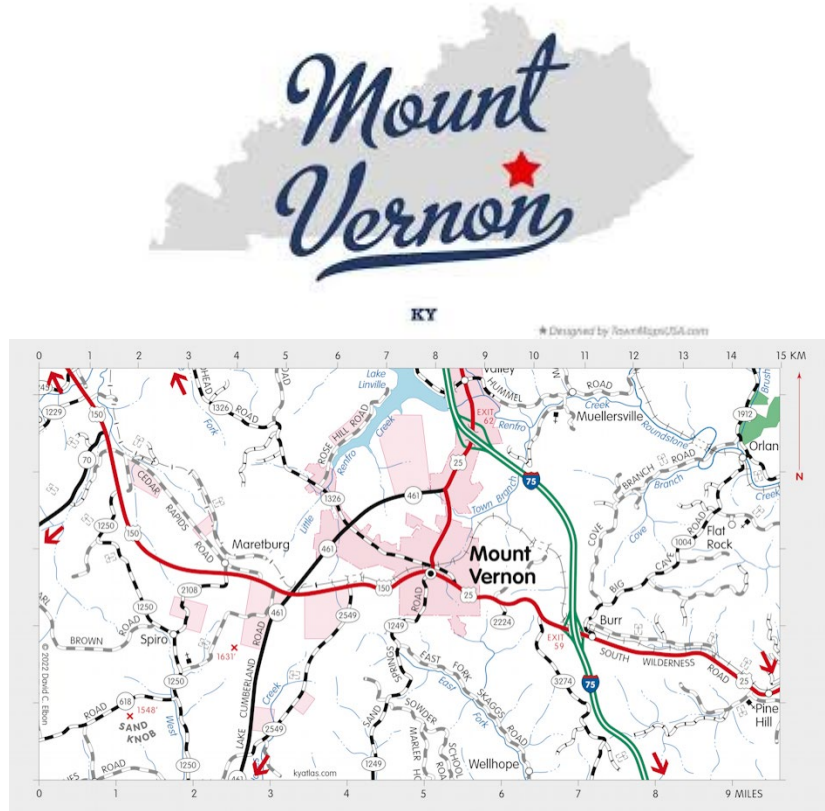


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INTRODUCTION

Bicycle and Pedestrian Master Plans are developed to address health, safety, tourism, and economic issues. The City of Mt Vernon in Rockcastle County, Kentucky plan focuses on the needs of the biking and walking pedestrians in the area. According to Kentucky's Vision for Access to Physical Activity Report, active transportation, such as walking or bicycling, allows residents to get physical activity while performing daily routines, such as commuting to work or school. Walking is one of the most popular forms of physical exercise for adults because it is less strenuous than using weights and does not require a lot of skill. This opportunity is supported by a Cooperative Agreement, funded by the Centers for Disease Control and Prevention (CDC). Funding is awarded to the Kentucky Department for Public Health State Physical Activity & Nutrition (SPAN) Program to implement the active living project.

PURPOSE OF THE PLAN

The purpose of the Master Plan is to identify, design, construct, and rehabilitate needed walkways and identify places to design and build future bikeways that connect neighborhoods, business centers, parks, and schools. It sets forth ideas and strategies for making Rockcastle County an inviting place to bike and walk. The Master Plan is a guide for city, county, and state governments, developers, road builders, citizens, and bicycle and walking enthusiasts when planning and developing future projects in the community.

BENEFITS OF WALKING AND BICYCLING

There are numerous reasons and benefits to promote walking and bicycling in Rockcastle County. Improved health, mobility, with an enhanced economy and quality of life are just to name a few.

Improved Public Health

In 2019, Kentucky was ranked the 43rd healthiest state in the nation. Rockcastle County ranks in the top 10 for both worst Health Outcomes and Health Factors out of 120 Kentucky Counties. It is widely recognized that regular daily physical activity reduces the risk for heart disease, diabetes, and obesity. By increasing the amount of public space for convenient and safe recreation and active transportation, Rockcastle County can increase the overall health of the community.

Improved Mobility

Accommodations for walking and bicycling as an alternative means of exercise and travel may appeal to a broader range of individuals within the community. Adults who have small children at home will be susceptible to use the walkways to enjoy the beautiful scenery that surrounds this area. Better accommodations will also help those who must use other means of transportation. Small children and the elderly would greatly benefit from having multi-modal choices (non-motorized transportation options) for daily travel and activity. By planning and providing more connections and greater access to all parts of the community, Rockcastle County can increase the ability to meet transportation needs and help improve the health of its residents.

Enhanced Economy and Quality of Life

A better walking and biking environment improve the quality of life for the surrounding community. Accommodating and safe walking and biking facilities in the community will create more opportunities for social interactions. A community that is walkable and bike-able for all ages will have positive economic advantages over other communities, such as having higher property values, being more attractive to new businesses, being more inviting for new home buyers, and having more to offer tourists. By planning for future bicycle and pedestrian facilities and accommodations, Rockcastle County can additionally benefit and become an even more thriving community within the region.

VISION AND GOALS OF THE PLAN

The overall goals of the Bicycle and Pedestrian Master Plan is that it will guide the city and county as it moves forward with implementing the plan. A goal summary is provided below:

Bicycle and Pedestrian Network and Support Facilities – Developing a network for safe and easy mobility throughout the city, county, and to the regional network.

Safety, Security, and Equity - Providing safe and useful connections between neighborhoods, business centers, parks, recreation facilities and schools. Modal considerations should be made with all residents, especially those who do not have access to private motorized vehicles in mind.

Transportation and Land Use – The adjacent land within the right-of-way of roadways, near commercial areas, and government owned properties should be considered for all uses. These areas are valuable with potential when providing non-motorized travel accommodations where walking and cycling improvements are most needed.

Education and Awareness – Communication lines should remain open so that all users of the transportation network have improved awareness of the need to share the roadways and trails, and recognize and observe traffic safety laws.

Maintenance and Operations – Maintain biking and walking facilities in good condition and serve the purpose for the intended users.

SOCIOECONOMIC ANALYSIS OF MT VERNON

The City of Mt Vernon, Kentucky, is in Rockcastle County in southeastern Kentucky. Mt. Vernon, Kentucky, (population 3,000) was established in 1790 around Spout Springs, a watering hole for early pioneers. The community's original name was White Rock, but it became known as Mt. Vernon, after George Washington's home, in about 1810.

Today, tourism contributes to the local economy, as do two industrial parks and Rockcastle County Hospital, the area's largest employer.

The Renfro Valley Barn Dance, an entertainment center, was established by John Lair in 1939. The Kentucky Music Hall of Fame and Museum is housed in the original John Lair horse barn, which is listed on the National Register of Historic Places. The museum honors all forms of Kentucky music, including folk, gospel, bluegrass, and jazz, although country music certainly holds center stage. Visitors can explore five interactive exhibits and use a recording studio, as well as view a historic timeline with exhibits and dioramas that trace Kentucky music from its pioneer beginnings to the first radio station in the 1940s.

In 2019 the percentage of residents in Rockcastle County below the poverty level was 26.7%. Also, in 2019, the American Community Survey provided estimates of how workers aged 16 and over traveling to work. Below are those estimates. The ACS also determined that the mean travel time to work traveled for 2019 was 28 minutes.

POLICY FRAMEWORK AND PREVIOUS WORK

It is hoped that by adopting this Master Plan, momentum can be gained and lead into adoption of favorable communal policies and ordinances, to finally require consideration, planning, and implementation of adequate future bicycle and pedestrian facilities with all new development and major reconstructions.

Method of Transportation	Number	Percentage of Working Population
Drove alone in car, truck, or van	1,186	79.60%
Carpooled in car, truck, or van	267	17.92%
Public transportation	0	0.00%
Walked	2	0.13%
Other (taxi, motorcycle, bike, etc)	23	1.54%
Worked at home	12	0.81%
<i>Source: U.S. Census Bureau, Table B08141 2015-2019 American Community Survey 5-Year Estimates</i>		

Cumberland Valley Area Development District

The concept of Area Development Districts (ADDs) originated in Kentucky in the early 1960s with the establishment of Area Development Councils. These Councils were organized in all counties and ultimately became the model for Area Development authorization in landmark federal acts such as the Appalachian Regional Development Act led by Kentuckian John Whisman and the Public Works and Economic Development Act of 1965. The fifteen Area Development Districts were formed during the period that followed, 1966 to 1972.

The mission of the ADDs is basic: To bring local civic and governmental leaders together to accomplish major objectives and take advantage of opportunities which cannot be achieved or realized by those governments acting alone.

Further, the ADDs are designed to be the focal point of a necessary Federal-State-Local partnership for improvement of the quality of life in the Commonwealth. This effort includes the elimination of, or certainly lessening of, parochialism; establishment of a forum to discuss and deal with common problems among counties; provision of a professional staff for units of government who individually cannot afford a staff; and to provide a vehicle for the delivery of services in a consistent manner where no other efficient system exists.

Each ADD is governed by a Board of Directors comprised of elected officials from the counties and communities within the district, as well as non-elected citizen members representing a cross-section of the region's social and economic institutions.

The Area Development Districts serve as forums, clearinghouses, technical centers, and as conveners for the region.

The Cumberland Valley Area Development District serves the counties of Bell, Clay, Harlan, Jackson, Knox, Laurel, Rockcastle, and Whitley.

Kentucky Transportation Cabinet Bicycle and Pedestrian Plan

In 2022, Kentucky adopted a Complete Streets, Roads, and Highways Manual. This is to be used as a guide to implement safe and equitable transportation strategies for facilities in rural and urban Kentucky. The goals of this document are to:

- Identify opportunities to promote and provide safe, convenient access to travel for all users of the transportation network while reducing crash rates and the severity of crashes.
- Improve mobility and accessibility of all individuals, including those with disabilities in accordance with the ADA.
- Safely integrate intermodal connections across the transportation network to maximize the efficient use of existing transportation facilities.
- Support mode shift to non-motorized transportation and transit in appropriate situations.
- Ensure early coordination during project scoping to identify and document potential actions or strategies to address impact or rehabilitation, reconstruction, or new construction projects to bicyclists, pedestrians, and transit riders of all ages.
- Offer internal and external training opportunities and other resource tools in the areas of planning, engineering, environmental services, education, encouragement, and evaluation to the state legislature, local elected officials, stakeholders, and local citizens.

The Mt Vernon Rockcastle County Bicycle/Pedestrian Master Plan is intended to strengthen the notion and incorporation of bicycle and pedestrian facilities in KYTC plans and projects. It's also there to provide guidance for making those considerations in the transportation project development process as early as possible. A copy of this plan will be provided to KYTC Central Office, KYTC Highway District Office 8, and to local officials to ensure that this analysis can be used to help develop projects in the area.

FACTORS THAT INFLUENCE WALKING AND BICYCLING IN ROCKCASTLE COUNTY

Destinations

The community has places that can be major attractions for people walking and cycling. These include retail stores, churches, playgrounds, schools, parks, medical facilities, and places of employment. It is important to provide safe and obliging options for all modes of transportation, other than just for motorized travel.

Time and Distance

Walking and biking to destinations is easier and more manageable when doing so in the urbanized downtown area than in the rural sections of the county. Research shows that the average walking trip is less than 1 mile and bike trips are less than 5 miles. Trips with a “recreational” or “exercise” emphasis tend to be longer. If walking and biking becomes safer and accommodating people are more likely to do so.

Demographics

Those who are unable to drive due to age, medical or economic reasons, or don't have a drivers' license due to traffic violations rely on walking and cycling for transportation. It is important to plan for the needs of all residents of Rockcastle County. Furthermore, the county should include residents of all abilities.

Environment

Weather and traffic play an all-important role in how often people in the community walk or bike for transportation. Barriers can be created when walking or biking through the county when hot and humid summer conditions and cold and wet winter conditions as well as narrow, curvy roads with fast moving traffic are combined together.

Community Attitudes

A positive perception can play a very important role in how frequently a person will walk or bike for transportation or recreation. If the perception is seen as socially acceptable, then the perceptions of the activity will change in a positive manner.



Example of a small sign in Pikeville, KY that could be adapted in Mt Vernon to promote walking

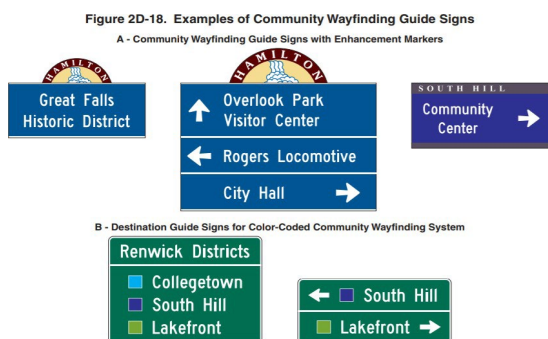
DESIGN STANDARDS AND GUIDELINES

The Kentucky Transportation Cabinet (KYTC) has published a Complete Streets Policy and a Complete Streets, Roads, and Highway Manual which provides guidance on planning for and accommodating pedestrians and cyclists in our state's transportation system. They are available at <https://transportation.ky.gov/BikeWalk/Documents/Complete%20Streets%20Policy.pdf> and <https://transportation.ky.gov/BikeWalk/Documents/Complete%20Streets,%20Roads,%20and%20Highways%20Manual.pdf>

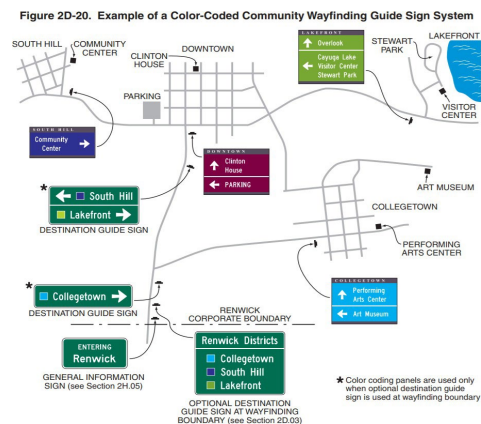
In conjunction with KYTC District 8, the City of Mt Vernon and Rockcastle County Road Department, planning activities should always include sidewalks and bicycle facilities (where feasible and practical). Rural area roadways should consider including wide paved shoulder (5 feet or wider) when and where feasible to further accommodate non-motorized transportation.

Pedestrian facilities should always be constructed to be compliant with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) to accommodate all people who live in or visit Mt Vernon. They are available at https://www.ada.gov/2010ADAstandards_index.htm

Paved roadway shoulders should include bicycle gaps within the rumble strips/stripes (10' gaps spaced every 40') to allow cyclists to exit either the shoulder or the roadway at reasonable interval. The rumbles should not extend continuously onto side roads. Shoulder rumbles that are deemed necessary within the urban boundaries should be the rolled type, as opposed to the more aggressive milled type.



Source: From MUTCD Manual 2009 Edition with 2012 Revisions



SIGNAGE AND MAPPING

Project planners should refer to the Manual of Uniform Traffic Control Devices (MUTCD) and consult with KYTC for all signage associated with roadways, bicycle, and pedestrian facilities before recommending or installing. The MUTCD Manual can be found here: https://mutcd.fhwa.dot.gov/kno_2009r1r2.htm. It is recommended that a city and county wide bicycle and pedestrian travel and facility map be developed and produced for current and future facilities.

Appropriate bicycling and pedestrian facility wayfinding signage should be considered in conjunction with a citywide navigational map to aid non-motorized travelers with navigation around the city. Appropriate warning signs should be considered and placed in advance of all bicycling and pedestrian facilities when deemed necessary. These signs should be part of the consideration with all new transportation projects.

BICYCLE PARKING

The City of Mt Vernon should seek to encourage and incentivize businesses and organizations that provide secure and accessible bike parking that is convenient for users where appropriate.

In general, bicycle racks should be in a highly visible area to prevent theft, be unobstructed, nor cause any obstruction to other traffic, and be mounted solidly to the ground or building in such a way that it cannot be easily removed. There should be a minimum clearance of 48" around the bike parking area and 72" should be allowed for a single bike lengthwise unless the rack allows vertical mounting. When feasible and possible bike parking should be covered to protect cyclists and their bikes from the weather.

Please refer to the *Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines* for more details at http://www.apbp.org/?page=Bike_Parking

DEFINITIONS

Bicycle Boulevard

Motorists and bicyclists share the roadway, but it is modified to be desirable for bicycle travel via traffic calming and speed reduction techniques, signage and pavement markings, and intersection crossing treatments. Bicycle boulevards typically provide for the through movements of cyclists while discouraging through trips by motorists (except those directly accessing properties along the route). Bicycle boulevards are typically planned and installed on low-volume, low speed shared streets that run parallel to a major vehicular corridor that is less desirable for bicycling.

Bicycle Rumble Strip Gap

A recurring short gap in continuous shoulder rumble strips designed to allow for ease of movement of bicyclists from one side of the rumble to the other. A typical pattern is gaps of 10 to 12 feet between groups of the milled-in elements at 40 to 60 feet intervals.

Bike Lane

A portion of the roadway is designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes can increase bicyclist comfort and safety, promote proper riding, discourage sidewalk riding, and increase awareness and visibility of cyclists to motorists. Bike lanes may also be paired with a painted buffer space to create a **"buffered bike lane"** which further separates the bicycle lane from adjacent motor vehicles lanes or parking lanes. Bike lanes may also be physically separated from motor vehicle traffic by grade or a barrier, such as a median, curb, or parking lane. These **"cycle tracks"** can increase the comfort of less skilled cyclists; however, they are currently classified as 'experimental' in the U.S. and require a detailed design/approval process.

Bicycle Rack

Bike racks are basic infrastructure for a bicycle-friendly community. Bicyclists need a secure location to park their bike, just as motorists need a place to park their car.

Bicycle Route

"Bike Route" signage is installed along shared roadways to provide wayfinding and to connect facilities and destinations. For instance, a bike route might be signed along a residential street that connects two trails. It may also identify a preferred route to a destination or through an area of town. The signage also provides a visual clue to motorists that they are driving along a bicycle corridor and should use caution.

Bikeway

Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to

be shared with other transportation modes.

Crosswalk

That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or in the absence of curbs, from the edges of the travelable roadway, and in the absence of a sidewalk on one side of the roadway, the part of a roadway included within the extension of the lateral lines of the sidewalk at right angles to the center line, or any portion of a roadway at an intersection or elsewhere distinctly indicated as a pedestrian crossing by pavement marking lines on the surface, which might be supplemented by contrasting texture, style, or color. It is encouraged for crosswalks to use either the ladder style or zebra style marking.

Crosswalk Lines

White pavement marking lines that identify a crosswalk.

Curb Cut

A solid (usually concrete) ramp graded down from the top surface of a sidewalk to the surface of an adjoining street. It is designed for pedestrian uses and commonly found in urban areas where pedestrian activity is expected.

Shared-Use Path

Shared use paths are designed for multiple users, including pedestrians, wheelchairs, bicyclists, and inline skaters. They are physically separated from motorized vehicular traffic by an open space or barrier. They are either within the roadway right-of-way, or within an independent right-of-way, often along stream corridors or abandoned rail lines.

Paved Shoulder

Recommended at least 5 feet of smooth riding surface, exclusive of rumble strips, is provided for use by cyclists and pedestrians and for disabled motor vehicles.

Rumble Strip

A *shoulder rumble strip* is a longitudinal safety feature installed on a paved roadway shoulder near the outside edge of the travel lane. It is made of a series of milled or raised elements intended to alert inattentive drivers (through vibration and sound) that their vehicles have left the travel lane. An *edge line rumble strip* is a special type of shoulder rumble strip placed directly at the edge of the travel lane with the edge line pavement marking placed through the line of rumble strips.

Sharrow

Bicyclists and motorists share the travel lane, but it is marked with Shared Lane Markings (SLM) or Sharrows to help position bicyclists within the shared lane and to encourage safe passing.

Share the Road

Share the Road warning signage may be installed along shared roadways to alert motorists of the presence of bicyclists along high-use bicycle corridors. For instance, signage might be installed along a popular bicycle commuter route through a neighborhood or along a recreational route regularly used by cyclists in a rural area.

Sidewalk

A walkway separated from the roadway with a curb, constructed of a durable, hard, and smooth surface, designed for preferential or exclusive use by pedestrians.

EXISTING CONDITIONS AND ANALYSIS

From field observations, investigations, and surveys filled out by residents, very few people commute to work without some sort of motor vehicle. Some non-motorized travel was observed, but it seemed to be concentrated in lower income households throughout the county.

EXISTING BICYCLE RESOURCES AND EVENTS

The City of Mt Vernon and Rockcastle County does not have any bike lanes, biking trails, or paths other than the local and regional sponsored events.

EXISTING PEDESTRIAN RESOURCES AND EVENTS

Most of the pedestrian activity in Mt Vernon is in the core downtown area and or recreational. The running tracks in the county are associated with the local high school. Most of the running/walking activity in the area occurs in local neighborhood parks and at the track located at the high school.

Mt Vernon does not have any specialty sporting goods store. Walking and running shoes are available at several stores.

No designated walking tours exist of the downtown area. Interviews with residents and responses to the public survey also indicate a desire for enhanced marked pedestrian friendly crosswalks down- town.

Within Rockcastle County, outdoor enthusiasts can enjoy the manmade trail around the Mt Vernon Lake.

FACILITIES CURRENTLY AVAILABLE FOR BICYCLING AND PEDESTRIAN ACTIVITIES

Collection Methods

Data was obtained from the Cumberland Valley Area Development District database of bicycle and pedestrian facilities. This data was reviewed and updated as appropriate.

Results

The City of Mt Vernon has a network of sidewalks in the downtown area. There are gaps in the connectivity due to deteriorated or missing sidewalk sections. The total length of sidewalks in the city is approximately 4.97 miles. Marked crosswalks are placed inconsistently around the city. There are no sidewalks outside of the downtown area. A map of the facilities is included in Appendix D.

The counts of bicyclists, pedestrians, and recreational runners that use the transportation system in Mt Vernon and Rockcastle County are not reliable. Evidence shows that the number of regular walkers and runners are few and a smaller number of active cyclists. The number of cyclists that are visiting is equal to or greater than those who live within the city. Strava heat maps help indicate routes heavily used by bicyclists and/or pedestrians.

Highlights

The City of Mt Vernon holds many events throughout the year where the streets downtown are blocked to motor vehicles. In July, Mt Vernon hosts Fourth of July activities and. During the summer months Mt Vernon has Music in the Park at the city park every Thursday. The Swift Silver mine Festival is held in September on Labor Day weekend. Mt Vernon's Fall Festival is held in October. Christmas in Mt Vernon is held in December at many locations around town.

Mt Vernon Lake is located 1.5 miles north of town. The Natural Bridge State Resort Park is 9 miles from town.

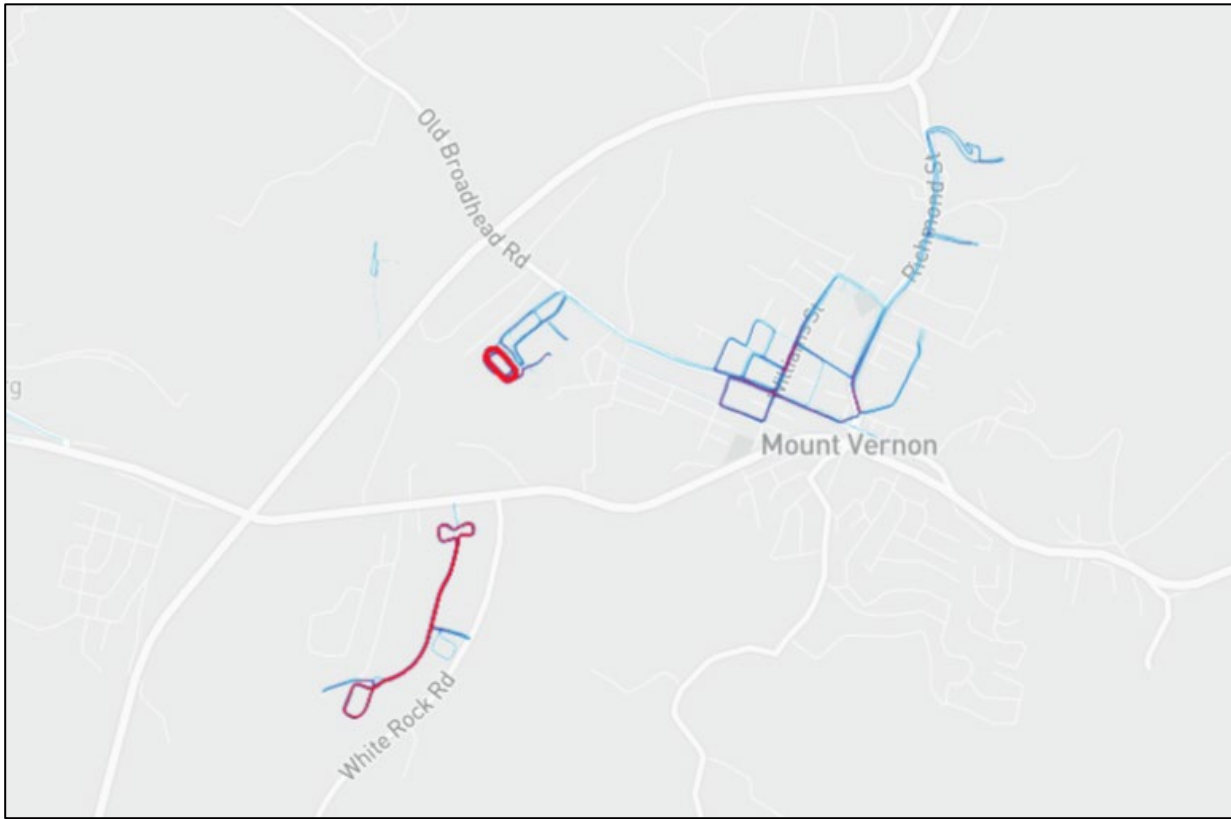
STRAVA MAPS OF CURRENT USERS

The use of Strava Heat Maps can be used in determining the popular areas for bicycling and walking. The maps below show areas for bicycling and walking in Mt Vernon. For bicycling, the area with bike traffic is Highway 15. The areas with no dedicated bicycle facilities should have proper signage so drivers of motorized vehicles can be aware. Walking pedestrians greatly employ the downtown area and along the track in the Rockcastle County Little League Park and at the high school.

Strava Heat Map of Bicycle Activity in Mt Vernon, Kentucky



Strava Heat Map of Pedestrian Activity in Mt Vernon, Kentucky



RESOURCES AND PUBLIC INPUT

COMMUNITY AND CIVIC RESOURCES

The Rockcastle County School System has four elementary schools, one middle school, and one high school which are mostly scattered throughout Rockcastle County. Rockcastle County High School, Middle School, and Mt Vernon Elementary are located within the city limits. Red River Elementary and Dessie Scott are outside the city limits.

The Rockcastle County Public Library is located on KY-15. The courthouse, city hall, and the extension office are all located on Main Street.

Rockcastle County has an abundance of recreational facilities. There are baseball/softball fields, basketball courts, tennis courts, a playground, several shelters, a walking track, and skateboard park. There is also a walking track located at the high school.

The area of downtown Mt Vernon is a mixture of commercial and residential development. There are retail business areas, restaurants, as well as banking and city government offices. There are also several churches in the downtown area. The shopping center in town contains a grocery store, medical services, a pharmacy, and bank.

PUBLIC INPUT AND PREFERENCES

Electronic Survey

The early stages of the plan development process included an electronic survey. The survey link was shared on the social media pages of the city, county, the ADD, and other local organizations. The survey included questions for the citizens of Mt Vernon and Rockcastle County to provide input on their walking and biking habits and preferences. This information was used in the development of the proposed bicycle and pedestrian facility networks and informed the development of goals and objectives. The following is a summary of some of the survey results. During the time the survey being posted there were 68 responses and 68 comments. Results are in Appendix A.

- ◆ For most parks, church, restaurants, medical facilities/pharmacy, and friends/relative's house are within 2 miles of home that residents could walk or bike to. However, 73.5% of the survey respondents said they used a motorized vehicle as their main source of transportation.
- ◆ The main factors noted as reasons residents don't walk or bicycle around town were insufficient sidewalks/no sidewalks, traffic, and too far from home. Traffic, too far from home, and insufficient sidewalks was the reasoning for why parents are discouraged from allowing their children to walk to/from school in Mt Vernon.
- ◆ 45.5% of residents would consider walking and biking more if they had a safer and more accommodating routes. 66.2% of people surveyed would utilize the path if it were more accommodating and safer.
- ◆ The biggest concerns that discourage people from walking or biking to areas that are close to their place of residence are no sidewalk and traffic.

Bike/Walk Events

There are few walking events in the City of Mt Vernon with the organizations in the city and surrounding area.

BIKEABILITY AND WALKABILITY AUDITS

BIKEABILITY AUDIT ANALYSIS

Due to no bike lanes or bike facilities in the county bikability audits were not conducted. In the future when bike lanes and bike facilities are added the City of Mt Vernon and Rockcastle County, the following questions will be used when performing a bikability audit. Bike lanes will be marked according to the U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD).

- Did you have a place to bicycle safely?
 - a. On the road, sharing the road with motor vehicles?
 - b. On an off-road path or trail, where motor vehicles were not allowed?
- How was the surface that you rode on?
- How were the intersections you rode through?
- Did drivers behave well?
- Was it easy to use your bike?
- What did you do to make your ride safer?

WALKABILITY AUDIT ANALYSIS

Representatives from the Kentucky River District Health Department and from the Kentucky River Area Development District conducted a Walkability Audit of downtown Mt Vernon and surrounding areas. Inventory was taken as to where crosswalk signals were not working/not available, sidewalks that were broken or unlevel, and other issues for pedestrians.

Some of the questions brought up during the Walkability Audit of Mt Vernon included:

- Location?
- Is there a presence of a suitable walking surface?
- Is there potential for conflict with motor vehicle traffic due to driveway crossing, speed and volume of traffic, large intersections, and low pedestrian viewing?
- Presence and visibility of crosswalks on roads intersecting the segment? Traffic signals meet pedestrian needs with separate walk lights that provide sufficient crossing time?
- Is there cracking, buckling, overgrown vegetation, standing water, etc. on or near the walking path?
- What is the useful path width, accounting for barriers to passage along pathway?
- Is there space separating path from adjacent roadway?
- How is the access for the mobility impaired?
- What is the proximity of construction zones, fences, buildings, noise pollution, quality of landscaping, and pedestrian oriented features?
- What is the amount of shade accounting for different times of day?

One of the first things noticed during the walking audit was the lack of signage used in town. Street signage with street names were missing in many places throughout the city. More pedestrian crossing signs could be beneficial for motorists in high foot traffic areas.

PROPOSED FACILITIES AND NETWORK

LIST OF PROPOSED PROJECTS

Every project identified and described in this section is intended to fill an existing need. These projects have been planned to take advantage of existing state or city owned property whenever possible. They have been planned to provide safe, accommodating, and the cost efficient non-motorized transportation solutions. Map of proposed projects can be seen in Appendix E Figure 1. The City of Mt Vernon has a Walk Score of 33 out of 100. Walk Score measures pedestrian friendliness by analyzing population density and road metrics. The walk score for this location is based on the categories of dining and drinking, shopping, errands, schools, and culture and entertainment. With this score the city is considered Car-Dependent, meaning most errands require a car.

Project 1: Sidewalk Repairs

Repair existing walks by edging, eliminating trip hazards, adding proper crossing signs, and properly draining low places. Sidewalks should meet Americans with Disabilities Act (ADA) standards. The City of Mt Vernon should work on identifying and repairing trip hazards on existing sidewalks. They can work on repairing other sidewalks that need to be destroyed and rebuilt.

Below is a list of the sidewalks needing immediate repairs:

- Plummer Street from Washington Street to end of existing
- North Johnson Street from Rockcastle County High School to Judicial Center
- Main Street from Washington Street to Johnson Street
- Washington Street from Main Street to City Park
- Rehabilitate existing sidewalks on Washington Street to ADA standards
- Rehabilitate sidewalks to ADA standards in city limits were deemed necessary

Project 2: Identify Places for New Path Ways

Several locations in Mt Vernon need new pedestrian pathways, with proper street lighting. By providing better pathways, it will assist those walking to do so in a safe manner. There is a need to connect existing sidewalks in areas that have mixed use development with shopping, restaurants, and medical facilities. Proper lighting would also create a safer area so that pedestrians are more visible.

Below is a list of locations for new or extending sidewalks:

- KY-15 from existing to businesses on Parkway Connector
- KY-191 from KY-15 to existing sidewalks
- Connecting Mt Vernon Square Apartments to KY-15
- Connecting existing sidewalks at Mt Vernon Methodist Housing apartments
- Mt Vernon Apartments Road from existing to KY-15
- Connect businesses via sidewalks or Shared us Path on US-25/Richmond Street under I-75
- Connect existing sidewalks on Washington Street from Main Street

Hazel Green is a small community located approximately 9 miles from Mt Vernon in Rockcastle County. There is a need to reconstruct the existing sidewalk networks along Main Street (KY-191) and Broadway Street (KY-1010). There may also be a need for additional sidewalks to be constructed along these routes to offer better connectivity to pedestrian route generators. These pedestrian route generators should include the community center, church, post office, grocery store, park, animal shelter, and fire department. All pedestrian projects should follow updated ADA design and construction guidance.

Future planning efforts should identify additional local streets in need of new sidewalk construction. The planning team did not identify need for additional bicycle travel accommodations for this area.

Areas in need of sidewalk reconstruction:

- KY-1010 existing sidewalk starting from Main Street
- KY-191 from existing sidewalks starting from Broadway Street to State Street

Areas are in need of new sidewalk construction:

- KY-191 from Main Street to Post Office
- CE-1020 from Main Street to local business

Project 3: Connectivity and Signage of Future Bike Routes

For safety awareness of both cyclists and motor vehicles, “Share the Road” or bicycle warning signs MUTCD W11-1 (<https://mutcd.fhwa.dot.gov/htm/2009/part9/pert9b.htm>) may need to be installed in appropriate locations to remind drivers that other forms of transportation are in the area. In the future shared lane markings, also called “sharrows,” may be used to indicate shared space for bicyclists and motorists on streets that have low posted speed and low traffic volume. These roads typically don’t have space for traditional bike lanes. Bike lanes may be used in some on wider road- way areas, when possible. These treatments may be added or changed when roadways are resurfaced. If space allows, some bike lanes can be buffered with a wider (minimum 2 feet) pavement marking. We will work with the KYTC on opportunities to re-mark and reallocate space on roads ways during resurfacing jobs.

Project 4: Pedestrian Crossings

Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops. Crosswalk markings also serve to alert road users of a pedestrian crossing point across roadways not controlled by highway traffic signals or STOP signs. At non- intersection locations, crosswalk markings legally establish the crosswalk.

Some location where pedestrians cross the roadway at a non-crosswalk location may warrant sign- age to alert motorists of this situation the proper signage for this use is the MUTCD W11-2 (<https://mutcd.fhwa.dot.gov/htm/2009/part2/part2c.htm>).

Appropriate signage should also be added in areas of heavy pedestrian traffic. The warning signs should be placed per AASHTO and FHWA guidance.

New Pedestrian Crosswalk and Signage Location:

- KY-191/Main Street traveling west into town
- Drake Street traveling east into town
- Miller Ridge from Highway-15 to dead end

Existing Crosswalk and Signage Projects:

- Repaint existing crosswalks in zebra or ladder marking style in city limits where necessary

Project 5: Create Rest Areas for Bicyclists and Pedestrians

It is recommended that bike racks should be located near businesses and other points of interest in the city. Benches should be added throughout the city where space allows, as well as at all city schools and parks. Benches will provide an option for bicyclists to rest after parking their bike and pedestrians to rest in between visits to a store, restaurants, or on their way to and from work. Benches should also be placed throughout the city to provide a place to rest while walking.

Project 6: Create a Walking Tour of Mt Vernon

Rockcastle County and the City of Mt Vernon may have historical features with its architecture and natural assets that is appealing to people from out of town. Stakeholders should put together a Walking Tour showing all the uniqueness of the city. This tour should include all the historical events that’s happened in the community, the old and new modern architectural buildings and churches and the museum in the city.

Project 7: Wayfinding Signage

The City of Mt Vernon should indicate public parking areas in the community with wayfinding signs as needed. Walking paths with smaller mileage signs could be created to show how far a pedestrian has walked along a corridor. Signs to show out of town visitors where to park would be extremely helpful. A map that shows where all the businesses are in the city could also be created and placed at all of the area hotels for out-of-town visitors.

Project 8: Provide Better ADA Accessibility

While doing the walkability audit, it was noted that the sidewalks in the downtown area are not handicap accessible. The City of Mt Vernon should strive to promote accessibility for all with additional dedicated handicapped parking spots on Main Street, side streets, and city owned parking lots. Parking spots that have ample room for someone with a wheelchair ramp to load and unload from the vehicle should be placed throughout the city.

The city shall ensure that the sidewalk ramps are not too steep for wheelchair users. Brick pavers should be avoided due to becoming trip hazards for those who walk with the assistance of a cane or walker. When handicapped ramps are not feasible handrails should be added along the steps of the sidewalks to assist those climbing stairs.

Project 9: Shared-use Path to Mt Vernon Lake

Survey results suggests the need of a shared-use path to Mt Vernon Lake. The path would encourage residents who are motivated to exercise to improve their health using other means then the local walking tracks, while enjoying nature.

Here are some examples of a shared-use path that can be built for the use off pedestrians in the community. The path can be a natural surface of a paved trail.

Appendix A

Pedestrian and Bicycle Survey Results

From June 24, 2022 to July 8, 2022 CVADD conducted a Pedestrian/Bicycle Survey. The survey was available online and advertised on social media. Below are the questions that were asked:

1. How much do you currently travel to work, shopping, parks, or other destinations just by walking or bicycling?

- a) All of the time
- b) A few times a month
- c) Once a month or less
- d) Never - I drive a car everywhere I go

2. Select all the following that are within 2 miles or less from your house:

- a) Work
- b) Restaurant
- c) Medical Facilities/ Pharmacy
- d) Friend's/Relative's House
- e) School
- f) Shopping
- g) Library
- h) Recreation/ Gym
- i) Church
- j) Park

Other:

3. What are your most frequent (3+ visits per week) destinations?

- a) Work
- b) Restaurant
- c) Medical Facilities/ Pharmacy
- d) Friend's/Relative's House
- e) School
- f) Shopping
- g) Library
- h) Recreation/ Gym
- i) Church
- j) Park

Other:

4. Would you consider traveling more on foot or biking to your destinations (compared to driving a car) if you had a better path?

- a) School Bus
- b) Car
- c) Bicycle/Walking
- d) N/A

5. Select all the factors that discourage you from making more trips on foot or bike? Traffic

- ☐ Lack of Signage
- ☐ Not Enough Sidewalks
- ☐ No Bike Lane
- ☐ Too Far From Home

____Not Physically Able

6. Do you like to walk or bike for recreation or exercise?

- a) Walk
- b) Bike
- c) Both
- d) No

7. If Hyden had more user-friendly pedestrian and bicycling would you use them more regularly (three or more times per week)?

- a) Yes (____Walk ____Bike)
- b) No

8. How do your children/grandchildren get to school most often?

- a) School Bus
- b) Car
- c) Bicycle/Walking
- d) N/A

9. Select all factors that discourage you from allowing your children/grandchildren from walking or biking to school?

- a) Traffic
- b) Lack of Signage
- c) Not Enough Sidewalks
- d) No Bike Lane/Rack
- e) Too Far From Home

10. What sidewalks need repair/replacement in Mt Vernon/Rockcastle County? Where should the city place more sidewalks?

11. Where do you think bike lanes are needed?

12. Additional comments:

Appendix B

Where are pedestrian facilities (sidewalks/crosswalks/signage) needed or in need of improvement? (Please include locations needed or locations in need of improvement)?

Area	Comment
Downtown	Main Street bridge, sidewalks on Plummer,
Downtown	Sidewalks back of old courthouse, from Mt Vernon Elem. to Main Street
Downtown	City Park to the High School, Mt Vernon Community Park back to town
Downtown	Everywhere in city limits
Highway-15	From intersection to Main Street
Highway-15	From intersection to shopping and restaurants on Highway-15
Highway-15	From intersection to Post Office and Library
Everywhere	All businesses and residents should be accessible by sidewalks
Everywhere	They all need fixing
Everywhere	From the park to the lake
Everywhere	There should be accessible sidewalk within city limits

Additional Comments:
Wheelchair access should be included and street crossings that beep for the visually impaired
Need level walking trails
Fire hydrants placed in the path of a sidewalk make that sidewalk inaccessible for wheelchair users no matter how nice the sidewalk is. And sidewalks should be built with ramps when possible and not steps and entry and exit points that are safe for entering businesses and other destinations.

Appendix C

Walkability Audit Results

In June of 2022, the Kentucky River Health Department and Kentucky River Area Development District completed a survey to identify each street's walkability throughout the city limits of Mt Vernon.

The walkability audit was completed using the following questions:

Location: _____ Date: _____

A. Pedestrian Facilities (High): presence of a suitable walking surface, such as a sidewalk or path.

1 No permanent facilities; pedestrians walk in roadway or on dirt path

2

3 Continuous sidewalks on both sides of road, or completely away from roads

4

5 Sidewalk on one side of road; minor discontinuities that present no real obstacle to passage

B. Pedestrian Conflicts (High): potential for conflict with motor vehicle traffic due to driveway and loading dock crossings, speed and volume of traffic, large intersections, low pedestrian visibility.

1 High conflict potential

2

3

4

5 Low conflict potential

C. Crosswalks (High): presence and visibility of crosswalks on roads intersecting the segment.
Traffic

signals meet pedestrian needs with separate 'walk' lights that provide sufficient crossing time.

1 Crosswalks not present, despite major intersections

2

3

4

5 No intersections, or crosswalks clearly marked

walking path. Does not include temporary deficiencies likely to soon be resolved (e.g. tall grass).

1 Major or frequent problems

2

3

D. Maintenance (Medium): cracking, buckling, overgrown vegetation, standing water, etc. on or near walking path. Does not include temporary deficiencies likely to soon be resolved (e.g. tall grass).

1 Major or frequent problems

2

3

4

5 No problems

E. Path Size (Medium): measure of useful path width, accounting for barriers to passage along pathway.

1 No permanent facilities

2 < 3 feet wide, significant barriers

3

4

5 > 5 feet wide, barrier free

F. Buffer (Medium): space separating path from adjacent roadway.

1 No buffer from roadway

2

3

4 > 4 feet from roadway

5 Not adjacent to roadway

G. Universal Accessibility (Medium): ease of access for the mobility impaired. Look for ramps and handrails accompanying steps, curb cuts, etc.

1 Completely impassible for wheelchairs, or no permanent facilities

2 Difficult or dangerous for wheelchairs (e.g. no curb cuts)

3

4 Wheelchair accessible route available but inconvenient

5 Designed to facilitate wheelchair access

4

5 Pleasant

H. Aesthetics (Medium): includes proximity of construction zones, fences, buildings, noise pollution, quality of landscaping, and pedestrian-oriented features, such as benches and water fountains.

1 Uninviting

2

3

4

5 Pleasant

I. Shade (Low): amount of shade, accounting for different times of day.

1 No shade

2

3

4

5 Full shade

Sum of High importance (A-C): _____ x **3** = _____

Sum of Medium importance (D-H): _____ x **2** = _____

Sum of Low importance (I): _____ x **1** = _____

Total Score _____ / 100

Observations

1. What is the most dangerous location along this segment?
2. What is the most unpleasant element of this segment?
3. What improvements would make this segment more appropriate for pedestrian use?
4. Would it be possible to design a more direct route to connect the ends of this segment?
5. Are the conditions of this segment appropriate and attractive for exercise or recreational use?

Appendix D

Sidewalk/Crosswalk Inventory Map

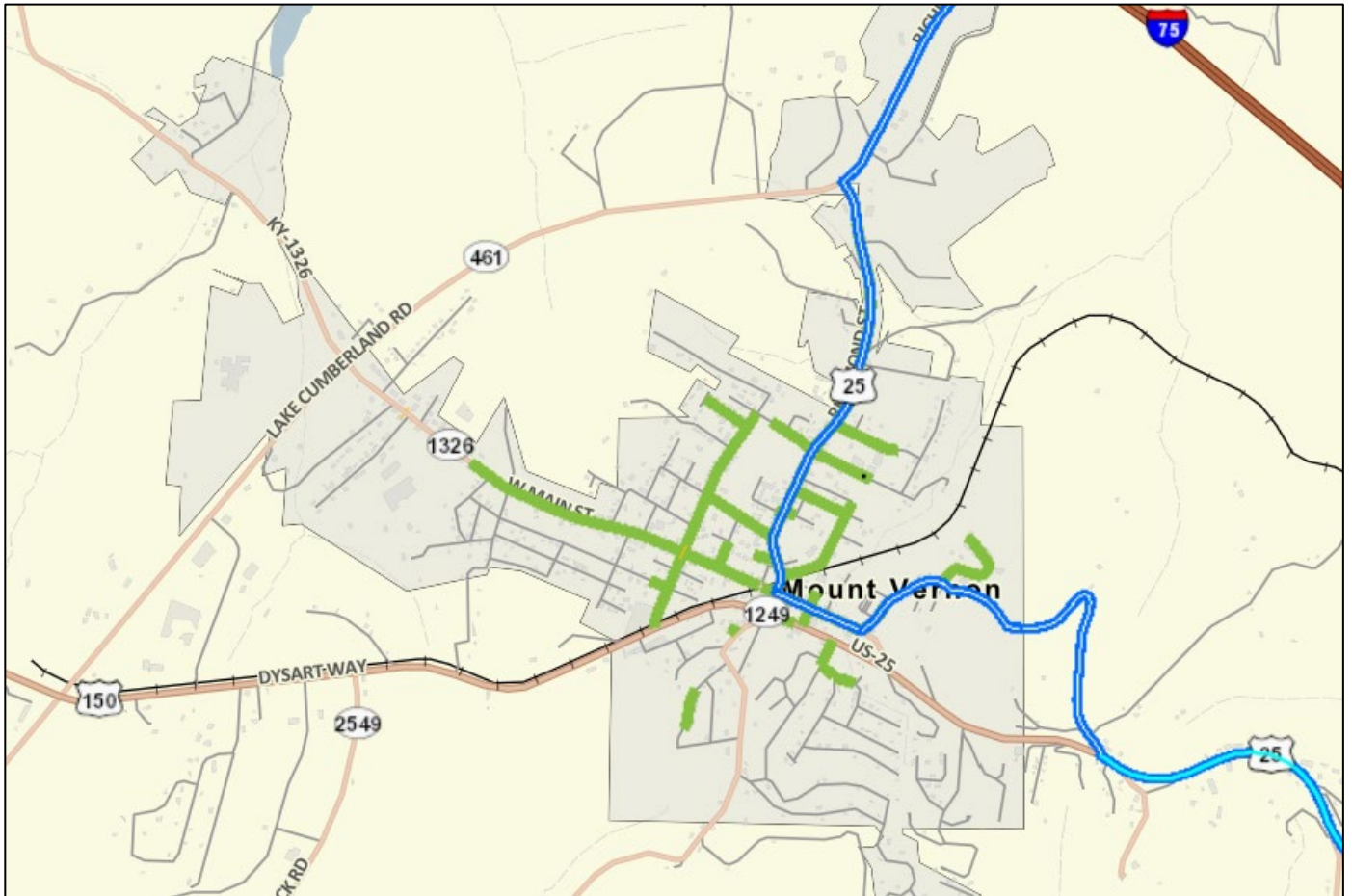


FIGURE 1:

Green lines represent existing sidewalks. Blue lines are US Bike Route 21/Daniel Boone Bike Tour (https://drive.google.com/open?id=1LgudkiBr7p_IFVoUqb--VtaijbuTdyBQ&usp=sharing_eil). Black dashed line represents the city boundary of Mt Vernon.

Appendix E

New Sidewalk/Sidewalk Repair Maps

Below are maps showing the locations of sidewalks in the Mt Vernon City limits that have been identified as having trip hazards or in need of replacement. Red lines represent existing sidewalk inventory. Yellow lines represent proposed rehabilitation projects. Black lines represent new projects.

Figure 1:

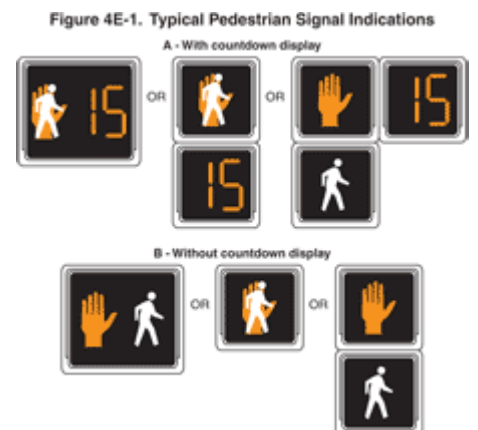
- Connect housing to grocery stores

Appendix F

High Visible Pedestrian Crossing Needed

Pedestrian crossing signs have been recommended to be placed in high foot traffic areas. Speeding traffic is the main concern for residents with children. Miller Ridge is a problem area for speeding traffic while children are at play. Traffic calming conditions should be in place to encourage the following of the speed limit.

Here are some examples of the equipment, signage, and crosswalk paintings that can be installed.



Appendix G

Promoting Bicycle and Walking Events in Mt Vernon

Throughout the year the City of Mt Vernon and Rockcastle County, along with several nonprofit organizations, hold numerous events.



The Mt Vernon-Rockcastle County Bicycle/Pedestrian Plan was completed in partnership of the following entities:

Kentucky River Area Development District 941

N. Main Street

Hazard, KY 40701

Phone: 606-436-3158

www.kradd.org

City of Mt Vernon

Rockcastle County Fiscal

Rockcastle County Board of

Rockcastle County Health Department

Rockcastle County Extension

Rockcastle County Public Library

Cabinet for Health and Family Services 275 E.
Main Street HS1EE
Frankfort, KY 40621
Phone: 502-564-9358

Rockcastle County